What is claimed is:

1. A method for determining whether a substance is an activator or an inhibitor of a function of a protein comprising: (a) contacting the protein with a substance to be tested, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase; and (b) measuring whether the function is inhibited or activated.

2. A method for determining whether a substance is an activator or an inhibitor of a function of a protein comprising: (a) contacting the protein with a substance to be tested, wherein the protein is a functionally equivalent variant, mutant or fragment of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase; and (b) measuring whether the function is inhibited or activated.

3. The method according to claim 1 wherein the inhibition or activation of the function is measured directly.

4. The method according to claim 1 wherein the inhibition or activation of the function is measured indirectly.

5. The method according to claim 1 wherein the protein is a mammalian protein.

6. The method according to claim 5 wherein the protein is a human protein.

7. The method according to claim 1 wherein the method is performed using a cellular system.

8. The method according to claim 1 wherein the method is performed using a cell-free system.

9. A method for determining an expression level of a protein comprising: (a) determining the level of the protein in a hyperactivated macrophage, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase; (b) determining the level of the protein in a non-hyperactivated macrophage, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase; and (c) comparing the level of the protein expressed in step (a) to the level of the protein expressed in step (b), wherein a difference in levels indicates a differentially expressed protein.

10. The method according to claim 9 wherein the hyperactived macrophage is a mammalian macrophage and the non-hyperactivated macrophage is a mammalian macrophage.

11. The method according to claim 10 wherein the hyperactived macrophage is a human macrophage and the non-hyperactivated macrophage is a human macrophage.

12. A method for diagnosing or monitoring a chronic inflammatory airway disease comprising: (a) determining the level of the protein in a hyperactivated macrophage, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide

Glycosyltransferase; (b) determining the level of the protein in a non-hyperactivated macrophage, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase; and (c) comparing the level of the protein expressed in step (a) to the level of the protein expressed in step (b), wherein a difference in levels indicates a differentially expressed protein.

13. The method according to claim 12 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD

14. A substance determined to be an activator or inhibitor of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase.

15. A substance determined to be an activator or an inhibitor of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase according to the method of claim 1.

16. A substance for the treatment of a disease wherein the substance is an activator or an inhibitor of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase

17. The substance according to claim 16 wherein the disease is a chronic inflammatory airway disease.

18. The substance according to claim 17 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.

19. A pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase.

20. A pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase according to the method of claim 1.

21. A method for treating a chronic inflammatory airway disease comprising: administering to a subject in need of such treatment an effective amount of a pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase.

22. A method for treating a chronic inflammatory airway disease comprising: administering to a subject in need of such treatment an effective amount of a pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase according to the method of claim 1.

23. The method according to claim 21 wherein the subject is a mammal.

24. The method according to claim 21 wherein the subject is a human.

25. The method according to claim 21 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.

26. A method for selectively modulating a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase in a macrophage, comprising administering a substance determined to be an activator or an inhibitor of a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase.

27. The method according to claim 26 wherein the macrophage is involved in a chronic inflammatory airway disease.

28. The method according to claim 27 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.

29. A method for selectively modulating a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase in a macrophage, comprising administering a substance determined to be an activator or an inhibitor of a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase according to the method of claim 1.